

WHAT ARE CLAIMED ARE:

1. An audio data processing apparatus, comprising:
  - a dividing device that divides PCM audio data into plurality of divided data, each divided data having overlapping sections overlapping  
5 with previous and following divided data;
  - an encoder that encodes the divided data one by one;
  - an analyzer that decides combining points where each encoded divided data can be recombined without overlapping with others within the overlapping sections; and
  - 10 a combining device that combines the divided data at the decided combining points.
2. An audio data processing apparatus according to claim 1 wherein the dividing device divides the PCM audio data by a unit of a  
15 frame of encoding.
3. An audio data encoding method, comprising the steps of:
  - (a) dividing PCM audio data into plurality of divided data, each divided data having overlapping sections overlapping with  
20 previous and following divided data;
  - (b) encoding the divided data one by one;
  - (c) deciding combining points where each encoded divided data can be recombined without overlapping with others within the overlapping sections; and
  - 25 (d) combining the divided data at the decided combining points.

4. An audio data encoding method according to claim 3 wherein the dividing step (a) divides the PCM audio data by a frame at a time of encoding.

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5. An audio data encoding program, comprising the instructions for:

(a) dividing PCM audio data into plurality of divided data, each divided data having overlapping sections overlapping with  
10 previous and following divided data;

(b) encoding the divided data one by one;

(c) deciding combining points where each encoded divided data can be recombined without overlapping with others within the overlapping sections; and

15 (d) combining the divided data at the decided combining points.

6. An audio data processing apparatus, comprising:

a dividing device that divides PCM audio data into plurality of  
20 divided data, each divided data having overlapping sections overlapping with previous and following divided data;

a plurality of processors that encodes the divided data and execute other process;

a detector that detects a free processor by watching loading  
25 conditions of the plurality of the processors;

a supplier that supplies the divided data to be encoded to the

free processor;

an analyzer that decides combining points where each encoded divided data can be recombined without overlapping with others within the overlapping sections; and

5 a combining device that combines the divided data at the decided combining points.

7. An audio data processing apparatus according to claim 6, further comprising a controller that stops one of the plurality of the  
10 processors to encode the divided data in order to make the processor execute the other process when the detector detects no free processor when there is a request for the other process.

8. An audio data processing apparatus according to claim 7,  
15 wherein the other process is a decoding process of the encoded data.

9. An audio data processing method, comprising the steps of:  
(a) dividing PCM audio data into plurality of divided data, each divided data having overlapping sections overlapping with  
20 previous and following divided data;

(b) detecting a free processor by watching loading conditions of a plurality of processors that encodes the divided data and execute other process

(c) supplying the divided data to be encoded to the free  
25 processor;

(d) deciding combining points where each encoded divided

data can be recombined without overlapping with others within the overlapping sections; and

(e) combining the divided data at the decided combining points.

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10. An audio data processing program, comprising the instructions for:

(a) dividing PCM audio data into plurality of divided data, each divided data having overlapping sections overlapping with  
10 previous and following divided data;

(b) detecting a free processor by watching loading conditions of a plurality of processors that encodes the divided data and execute other process

(c) supplying the divided data to be encoded to the free  
15 processor;

(d) deciding combining points where each encoded divided data can be recombined without overlapping with others within the overlapping sections; and

(e) combining the divided data at the decided combining  
20 points.

11. An audio data distributing apparatus, comprising:

a dividing device that divides audio data into a plurality of divided data;

25 an encoding device that encodes the divided data;

a transmitter that transmits the encoded divided data;

a detecting device that detects a condition of a communication network; and

an instructor that instructs a bit rate suited for the detected condition of the communication network to the encoder at a time of  
5 encoding each divided data.

12. An audio data distributing apparatus according to claim 11, wherein

the encoder encodes PCM audio data to MP3 data, and  
10 each divided data has overlapping sections overlapping with previous and following divided data, and further comprising:

an analyzer that decides combining points where each encoded divided data can be recombined without overlapping with  
15 others within the overlapping sections; and

a combining device that combines the divided data at the decided combining points and supplies the combined data to the transmitter.

20 13. An audio data distributing method, comprising the steps of:  
(a) dividing audio data into a plurality of divided data;  
(b) encoding the divided data;  
(c) transmitting the encoded divided data;  
(d) detecting a condition of a communication network; and  
25 (e) instructing a bit rate suited for the detected condition of the communication network to the encoder at a time of encoding each

divided data.

14. An audio data distributing program, comprising the instructions for:

- 5 (a) dividing audio data into a plurality of divided data;
  - (b) encoding the divided data;
  - (c) transmitting the encoded divided data;
  - (d) detecting a condition of a communication network; and
  - (e) instructing a bit rate suited for the detected condition of
- 10 the communication network to the encoder at a time of encoding each divided data.